

WEST

L3: Entry 6 of 15

File: USPT

Aug 27, 2002

DOCUMENT-IDENTIFIER: US 6440448 B1

TITLE: Food supplement/herbal composition for health enhancement

Brief Summary Text (2):

As is well known there are many vitamins and minerals, essential fatty acids, proteins and carbohydrates which are required to sustain the human body. Recently the lack of vitamins, minerals and essential-unsaturated fatty acids have been linked to the creation of various diseases, more specifically those diseases of aging such as in arthritis and cancer as well as others. Recently noted is the evidence that the unsaturated fatty acids and their derivatives, e.g.: salts, amides, and esters, play a role in the synthesis of prostaglandin which are local hormones which have multiple physiological functions.

Brief Summary Text (6):

The antioxidants listed in this invention are known to play a role in inhibiting degenerative processes. Amongst the degenerative conditions discussed in the body of common knowledge of the art, the following are considered degenerative diseases, but by no means is the list limited to these conditions. Examples are arthritis, cancer, aging, certain cardiovascular diseases. Many of the degenerative diseases in the human body are partially due to the interference of the synthesis of essential prostaglandin (local hormones) as we age. It is viewed that this is specifically due to the inhibition of the enzyme known as Delta-6-Desaturase. This enzyme normally converts essential unsaturated fatty acids in healthy cells to prostaglandin. Thus in the above list as well as in other degenerative conditions the enzyme is lacking or decreased and the effect is a decrease or lack of prostaglandin and therefore a disease condition in process.

Brief Summary Text (7):

An example of a well known antioxidant which protects blood cells as well as unsaturated fatty acids, which are a source of prostaglandin production is Vitamin E. Vitamin E also protects Vitamin A, another suspected source of prostaglandin production. Therefore, one of the purposes of this invention is the addition of one of the most powerful antioxidants, Pycnogenol (TM) from grape seed extract or the bark of the Merrittime Pine tree. This antioxidant will protect both Vitamin A and E. It is common knowledge in the art that the production of free radicals (oxidants) do produce aging and disease. Also a genetic propensity is indicated in aging quickly or slowly as well as in most diseases such as cancer. It is also viewed that oxygen free radicals have a mutating effect upon cellular DNA/RNA. Thus the importance of the antioxidant is the invention under discussion.

Brief Summary Text (9):

In one embodiment, the invention is directed to a food supplement which comprises, in combination, (i) an extract which is stable for an indefinite amount of time in a dry state at ambient conditions, (ii) said extract being selected from, extracts prepared by aqueous or non-aqueous extractions of plant tissue, each said plant tissue being, respectively, selected from at least one member of a group consisting of roots, stems, seeds, rhizomes, flours, the entire plant tissue and mushrooms, (iii) in an orally ingestible carrier or diluent, (iv) each said plant tissue being, respectively, from a plant selected from the group consisting of Arctium Lappa, Commiphoria Mukul, Curcuma longa, Echinacea Angustifolia, Echinacea Purpurea, Ganoderma Lucidium, Hydrastis Canadensis, Inula Helenium, Lens Esculenta, Lentinus Edodes, papain, Pisum Sativum, Proanthocyanidins, Terminalia Chebula, Trifolium Pratense, Ulmus Fulva, Verbascum

Thapsus and mixtures thereof, and optionally, further comprising, (v) extract of animal tissue selected from at least one member of the group consisting of adrenal gland bovine origin, lymphoid mass bovine origin, bovine pancreas, thymus gland bovine origin and mixtures thereof. The foregoing food supplement of at least one of the plant tissues comprises an antioxidant. Still further in the food supplement previously described, at least one of said plant tissues is a Proanthocyanidin.

Detailed Description Text (2):

Food Supplement 1. Adrenal gland bovine origin. 150 mg. Cold pressed, source of DHEA (dehydroepiandrosterone), known for its antitumor effect. DHEA treatment inhibits tumor initiation as well as tumor promoter-induced epidermal hyperplasia and promotion of papillomas. There is much evidence that DHEA produces its antiproliferative and tumor preventive effects by inhibiting glucose-6-phosphate dehydrogenase and the pentose phosphate pathway. This pathway is an important source of NADPH, a critical reductant for many biochemical reactions that generate oxygen free radicals which may act as second messengers in stimulating hyperplasia. 2. *Arctium lappa* (burdock) 50 mg. Dried & ground roots & seeds. Contents: several volatile oils; inulin; tannin; and a bitter glycoside called artiin. Traditionally this herb is stated to act upon the respiratory, urinary, circulatory and lymphatic systems; contains an antimutagenic lignin-like compound. 3. *Commiphora Mukul*; bursaceae (guggel) 250 mg. Resin of plant. Traditionally in ayurvedic medicine this resin acts on the nervous, circulatory, respiratory and digestive systems. It is specifically indicated and used for tumors, bronchitis, whooping cough, respiratory infections, and many other conditions. The chemistry is unavailable. 4. *Curcuma longa* (turmeric) 100 mg. Dried & ground rhizome traditionally this is a good natural antibiotic which also aids the digestion and the natural intestinal flora. Contains bitter principles, curcumin (a yellow pigment) and a volatile oil. 5. *Echinacea angustifolia* or *Echinacea purpurea* (cone flower) 200 mg. Dried & ground root & rhizome. Contents: it is viewed/stated that both *angustifolia* and *purpurea* have the identical chemistries but for the sake of stability I shall direct attention to *E. angustifolia*. There is a bacteriostatic principle termed echinacoside, a caffeic acid glycoside and a polysaccharide termed echinacin B, which forms a complex with hyaluronic acid that is resistant to attack by hyaluronidase. Also a hydrocarbon in the root oil termed (z)-1,8-pentadecadiene has definite in-vivo antitumor effects. 6. *Ganoderma lucidum* (mushroom) 100 mg. Dried & ground in its entirety. Traditionally known and used in oriental medicine for its antitumor effects. The chemistry is unavailable. 7. *Hydrastis canadensis* (golden seal) 50 mg. dried & ground rhizome. The chief compositions of this herb and mostly found in the rhizome are; the alkaloids berberine about 4% (C-20, H-17, NO₄) which gives the yellow coloring to this chemical. Also hydrastine, about 4%; canadine; resin, lignin and a small amount of a volatile oil. Both berberine and hydrastine are noted for their astringent effect in inflammation of the mucous membranes; thus a calming effect is created in the lungs to quell cough and induce expectoration of mucous, at the same time soothing said membranes. 8. *Inula helenium* (elecampane or wild sunflower). 100 mg. Dried & ground rootstock & rhizome. The main chemical constituents are a chemical termed inulin also named alatin. This plant's root is in fact the richest source of inulin. The specific breakdown of constituents are; alanin (C-3, H-7, NO₂); also termed amidopropionic acid; also alant-camphor (C-10, H-18, O); and an oily liquid termed helenin (C-15, H-20, O₂). The traditional uses of the root are: diuretic, tonic, diaphoretic, expectorant, alterative, antiseptic, astringent and stimulant. The bitter active principle named helenin by Korab in 1885 showed that it was a powerful bactericide in general but specifically used on the tubercle bacillus. 9. *Lens esculenta* (lentil bean). 100 mg. Dried & ground bean. Wolf, quoted in "The Death of Cancer," Dr. Harold W. Manner, 1979 discovered a proteolytic-lipolytic enzyme within this bean which specifically destroys the protein coat of tumors. The specific chemistry is unavailable. When cancer cells proliferate, the DNA changes to single-stranded DNA. The *Lens esculenta* nucleases digest the single-stranded DNA. Also noted is the fact that proteases may facilitate metastasis of cancer cells; *Lens esculenta* protease inhibitors may prevent cancer metastasis, the same holds true for mung beans which may be used. 10. *Lentinus edodes* (shiitake mushrooms). 100 mg. Dried & ground in its entirety. Traditionally known for its antitumor effect in oriental medicine. The chemistry is unavailable. 11. Lymphoid masses bovine origin, from peyer's patches of intestinal tract. 200 mg. Freeze dried glands, ground. This has specific actions with increasing the immune system function and T-4 helper cells as in helping aids patients and in all auto-immune diseases. 12. Pancreas, bovine. 50 mg. Freeze dried gland ground. Noted for its' aid in breaking down the protein coats of

tumors and the dissolving of mucous. 13. Papain (papaya enzyme). 50 mg. Extracted from dried fruit and leaves and then ground into powder. Noted for its specific action in breaking down the protein coats of tumors and the dissolving of mucous. Enzymatic chemistry is common knowledge. 14. Pisum sativum (garden pea). 50 mg. Dried whole crushed pea. Noted for its specific action in breaking down the protein coats of tumors and the dissolving of mucous. 15. Proanthocyanidins such as PYCNOGENOL (TM) from merritime pine tree bark or grape seed extract ground & dried. 300 mg. Noted as a strong antioxidant and free radical scavenger aiding in immunity. 16. Terminalia chebula (haritaki) 200 mg. Dried & ground fruit. Traditionally used in ayurvedic medicine on the digestive, excretory, nervous and respiratory systems. Amongst its many uses are indicated uses in cough, asthma, parasitic infections, tumors, jaundice, heart diseases and many other conditions. The chemistry is unavailable. 17. Thymus gland, bovine origin. 150 mg. Dried & ground/cold pressed. This glandular extract has specific actions regarding the immune system and enhancing it as well as increasing the T4 helper cells as in helping aids patients and all auto immune diseases. 18. Trifolium pratense (red clover). 50 mg. Blossoms, dried & ground. Traditionally used in ayurvedic medicine on the circulatory, respiratory and lymphatic systems. It is indicated for coughs, bronchitis, infections and cancer. Its use as an anti-cancer agent is increased when used in conjunction with other herbs. Prolonged use may cause leukopenia. 19. Ulmus fulva (slippery elm). 500 mg. The inner bark dried & ground. A well known natural remedy for lung conditions used for centuries. It is an emollient, expectorant, diuretic and nutritive. It aids in healing lung hemorrhages and in the restoration of mucous membranes particularly of the lungs and stomach. The constituents are primarily a mucilage containing starch rich in calcium oxalate. 20. Verbascum thapsus (great mullein). 200 mg. Leaves & flowers dried & ground. This well known herb is used for its applications as a demulcent, emollient, antiseptic, astringent, pectoral, hemostatic, antispasmodic and anti-asthmatic amongst other uses. It is therefore specific for the lungs and other organs relative to healing mucous membranes. The leaves contain a mucilaginous bitter substance. This gum contains one to two percent of resin, a soluble bitter substance, an amoroid, tannin, saponin. The flowers contain a gum, resin, a yellow coloring principle, a green fatty substance resembling chlorophyll, a glucoside fatty matter, free phosphoric acid, uncrystalizable sugar, mineral salts mostly composed of potassium and calcium phosphates, a mucilaginous saponitic substance, a volatile oil and an astringent and sedative principles which are unidentified.

CLAIMS:

1. A food supplement which consists of, in combination (i) an orally ingestible carrier or diluent, and (ii) an extract which consists of a mixture of aqueous or non-aqueous extractions of plant tissue of each of the following plants: (a) Arctium Lappa, (b) Commiphora molmol, (c) Curcuma longa, (d) Ganoderma Lucidium, (e) Lens Esculenta, (f) Lentinus Edodes, (g) Pisum Sativum, (h) Terminalia Chebula, (i) Trifolium Pratense, (j) Verbascum Thapsus, and at least one of (k) Echinacea Angustifolia, or (l) Echinacea Purpurea.
6. A food supplement which comprises, in combination (i) an orally ingestible carrier or diluent, and (ii) an extract which consists of a mixture of aqueous or non-aqueous extractions of plant tissue of each of the following plants: (a) Arctium Lappa, (b) Commiphora molmol, (c) Curcuma longa, (d) Ganoderma Lucidium, (e) Lens Esculenta, (f) Lentinus Edodes, (g) Pisum Sativum, (h) Terminalia Chebula, (i) Trifolium Pratense, (j) Verbascum Thapsus, and at least one of (k) Echinacea Angustifolia, or (I) Echinacea Purpurea; and, (iii) an extract of animal tissue selected from at least one member of the group consisting of adrenal gland bovine origin, lymphoid mass bovine origin, bovine pancreas and thymus gland bovine origin.
7. A food supplement which comprises, in combination (i) an orally ingestible carrier or diluent, and (ii) an extract which consists of a mixture of aqueous or non-aqueous extractions of plant tissue of each of the following plants: (a) Arctium Lappa, (b) Commiphora molmol, (c) Curcuma longa, (d) Ganoderma Lucidium, (e) Lens Esculenta, (f) Lentinus Edodes, (g) Pisum Sativum, (h) Terminalia Chebula, (i) Trifolium Pratense, (j) Verbascum Thapsus, (k) Hydrastis Canadensis, (l) Inula Helenium, (m) papain (n) Proanthocyanidius, (o) Ulmus Fulva and at least one of (p) Echinacea Angustifolia, or (q) Echinacea Purpurea.